

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/054212 A2

(51) International Patent Classification⁷: **C07D 249/22**,
249/20, C07F 5/04, C07D 405/14, C09K 11/06, H05B
33/14, H01L 51/20

(74) Common Representative: **CIBA SPECIALTY CHEM-
ICALS HOLDING INC.**; Patent Department, Klybeck-
strasse 141, CH-4057 Basel (CH).

(21) International Application Number:
PCT/EP2004/053111

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(22) International Filing Date:
26 November 2004 (26.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03104562.8 5 December 2003 (05.12.2003) EP
04104279.7 6 September 2004 (06.09.2004) EP

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **CIBA
SPECIALTY CHEMICALS HOLDING INC.** [CH/CH];
Klybeckstrasse 141, CH-4057 Basel (CH).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **ROGERS,**
Jonathan [US/US]; 25 Martine Avenue, PH 104,
White Plains, New York 10606 (US). **MAIKE, François**
[FR/FR]; 30A, rue de la libération, F-68510 Geispitzen
(FR). **DAN, Norihisa** [JP/JP]; 79-14, Hashimoto kuri-
gadani, Yawata-shi, Kyoto 614-8327 (JP).

Published:

— *without international search report and to be republished
upon receipt of that report*

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: ELECTROLUMINESCENT DEVICE

(57) Abstract: Disclosed are electroluminescent devices that comprise organic layers that contain certain 2H-benzotriazole com-
pounds. The 2H-benzotriazole compounds are suitable components of blue-emitting, durable, organo-electroluminescent layers. The
electroluminescent devices may be employed for full color display panels in, for example, mobile phones, television and personal
computer screens.

WO 2005/054212 A2